



# 2004 Annual Report of the Environmental Finance Center Network

## Region 3 – EFC at the University of Maryland

*The University of Maryland focuses on watershed issues,  
especially in the Chesapeake Bay region*

### INTRODUCTION

With support from the U.S. Environmental Protection Agency (EPA), the Environmental Finance Center at the University System of Maryland was created to assist local communities in identifying innovative and equitable means of paying for environmental projects. The mission of the Environmental Finance Center is to provide communities with the tools and information needed to manage change for a cleaner environment and an enhanced quality of life. In an effort to encourage communities to make informed choices related to the protection of the environment –

especially watersheds – the EFC works to promote an atmosphere of respectful, innovative, and creative communication.

## NEW PARTNERSHIP

On September 1, 2004, the Environmental Finance Center officially joined the Institute for Governmental Service at the University of Maryland. The EFC is excited about the opportunities that this new partnership will bring. It will allow communities throughout the region to leverage the resources of three established and successful University of Maryland programs – EFC, IGS, and Sea Grant – and will certainly result in new and innovative approaches to building sustainable, livable communities throughout the Chesapeake Bay region.

Coinciding with the new IGS partnership, there have been several EFC staffing changes. After 12 years of distinguished service, Dr. Jack Greer – of Maryland Sea Grant - stepped down as EFC Director on December 31, 2004. Though Jack's leadership will be missed, he has agreed to serve as Senior Advisor to the EFC. The following is a complete staff listing:

- Dan Nees, **Director**
- Michelle O'Herron, **Program Manager**
- Jean Holloway, **Training and Education Manager**
- Dr. Jack Greer, **Senior Advisor**
- Michelle Lennox, **Project Assistant**
- Jennifer Cotting, **Project Assistant**

## ACCOMPLISHMENTS

In order to help communities and local governments participate in effective and responsible environmental management on a watershed scale, the Environmental Finance Center continued to develop and deliver effective, innovative technical assistance and training for financing environmental protection and restoration. To carry out this goal, the Environmental Finance Center focused on the following key objectives throughout 2004:

- Delivered training and information on watershed-based financing.
- Investigated new and innovative uses of funding sources and emerging markets.

- Assisted communities and local governments with capacity development.
- Developed efficient and effective outreach and education tools for reaching a broad clientele with information about innovative and sustainable environmental finance approaches.
- Worked with key partners, especially the Chesapeake Bay Program, the University of Maryland Institute for Governmental Service, and Maryland Sea Grant College.

## Technical Assistance

### *Chesapeake Bay Blue Ribbon Finance Panel*

A significant focus of EFC's work over the past decade has been to assist community leaders throughout the region in their efforts to finance the restoration and protection of the Chesapeake Bay, our nation's largest estuary. The funding and financing challenges are significant. In order to solve the primary cause of the Bay's decline – excess nutrients from farms, wastewater treatment plants, septic systems, city streets, suburban lawns, even from the air – communities will be required to implement best management practices (BMPs) far above those currently in place. The costs associated with implementing these BMPs are staggering – upwards of \$30 billion by some estimates. In an effort to identify funding opportunities for dealing with this enormous financing problem, the governors of the Bay states authorized the formation of the Chesapeake Bay Watershed Blue Ribbon Finance Panel. The Chesapeake Bay Program requested the Environmental Finance Center's assistance in staffing the Blue Ribbon Finance Panel as it undertook its important work.

The Panel was charged with evaluating possible funding sources and financing mechanisms for reducing nutrient and sediment pollution throughout the Bay watershed. The Chesapeake Executive Council, which establishes the policy direction for the restoration and protection of the Chesapeake Bay, asked the panel to “consider funding sources to implement the tributary strategies basin-wide, and to make recommendations regarding other actions at the federal, state and local level to the Executive Council.”

Fifteen distinguished individuals were selected to serve on the Blue Ribbon Finance Panel. Panel Members included high-level business leaders of major companies, financial and economic experts; stakeholders with experience in storm water, agriculture, air emission and wastewater treatment plant funding and pollution

control; and current and former local, state, and federal officials with financing expertise. Additionally, experts and presenters from various fields of expertise provided invaluable information to the panel.

The EFC played an integral role in developing program strategies, providing technical support, as well as facilitating and coordinating panelist discussions. Each of the Blue Ribbon Finance Panel Meetings addressed a particular sector that delivers nutrients and sediment to the Bay. The sectors covered included Municipal and Industrial Wastewater, Agriculture, as well as Developed Lands, Forests and Air Deposition. The Panel's recommendations are contained in the 40-page final report, ***Saving a National Treasure: Financing the Cleanup of the Chesapeake Bay***. The report is available on the EFC web site: [www.efc.umd.edu](http://www.efc.umd.edu).

In addition, the EFC has been presenting the results of the Blue Ribbon Panel at Tributary Team meetings around Maryland including: Upper Western Shore, Patuxent River, Patapsco River, and Upper Potomac River, in addition to the Tributary Team Leaders in Annapolis, MD.

### *The Interagency Technical Assistance Committee on Wastewater Systems in Maryland (ITAC)*

In December of 2000, the leadership of the Maryland House and Senate, the Chairs of the Economic and Environmental Affairs and the Environmental Matters Committees, and the Chair of the Maryland Delegation to the Chesapeake Bay Commission wrote to then Governor Parris N. Glendening about the wastewater needs of the State. In March 2001 an Executive Order created the Task Force on Upgrading Sewerage Systems to assess wastewater infrastructure needs and to identify other challenges to the successful planning, design and construction of wastewater facilities to accommodate existing and projected population. The previous EFC Coordinator served on this Task Force and contributed substantially to its findings and recommendations. The Task Force produced a report in December 2001 identifying the need for \$4.3 billion in capital funds to address wastewater treatment plants and collection systems. The report made several other recommendations, including evaluating and improving the Water and Sewerage Planning process.

In a follow-up to this effort, House Bill 659 was passed in the 2002 session of the Maryland General Assembly. This bill was a combination of three bills before the legislature, which called for the study of a wide variety of water security and wastewater systems topics. HB 659 created the Advisory Council on Water Security and Sewerage Systems and the Interagency Technical Advisory Committee (ITAC).

The Interagency Technical Assistance Committee on Wastewater Systems in Maryland (ITAC) was charged with implementing a recommendation of the Governor's 2001 Task Force on Upgrading Sewerage Systems by advising local jurisdictions on the efficient operation and financial management of wastewater treatment systems. Currently, the EFC Training and Education Manager sits on this committee.

In the course of initial joint meetings of the ITAC and the Advisory Council on Water Security and Sewerage Systems (Advisory Council), it was determined that the ITAC would be responsible for updating the 2001 Task Force report, as well as certain tasks outlined in HB 659 originally assigned to the Advisory Council, specifically the finance, public awareness and technical assistance recommendations from the 2001 Task Force Report. The ITAC was required to report its findings to the Advisory Council on or before November 1, 2004, with the final report to be presented to the legislature by the end of calendar 2004. The Advisory Council's work will be complete with the submission of their report, but the ITAC will continue to review and implement recommendations made by the 2001 report as well as new ones arising in the course of the current deliberations and report from 2004.

To accomplish these initial tasks, several subcommittees were formed including a Finance Subcommittee, chaired by the EFC Training Manager and a Public Education and Technical Assistance Subcommittee, of which the Training Manager was a member. The EFC Training Manager also assisted in the drafting of several sections of the final report at the request of the Advisory Council chair and MDE staff. This new committee concluded, among other things, that funding needs are now estimated at approximately \$5.3 million, and that funding currently committed may be sufficient to meet those needs for the short term provided changes are made in the way those funds are allocated and utilized. The committee's report, issued in December 2004, also recommended that more effort be directed towards training for local officials to enhance system capacity and sustainability, and that there appears to be a need for better education on what balanced system operation entails. The ITAC will continue to meet throughout 2005 to elaborate further on its findings and to make recommendations for implementation of specific areas of its report.

### *Financial and management capacity training*

Utility rates offer a mechanism for capturing most of the costs of operating and maintaining water and waste water systems and can ensure that they are self-supporting. Good financial management and sustainability for water and wastewater systems entails prudent long range planning, especially Capital Improvements

Planning (CIP) and Asset Management skills in addition to sound overall management practices.

The EFC continued to offer rate design and CIP training workshops to elected officials, utility operators, engineers and others interested in the concepts and technicalities of properly managing and sustaining utility systems. The EFC made use of the CAP Finance program developed by EFC 10 to illustrate sound capital expenditure planning methods in its applicable training sessions, and to assist communities individually when needed.

Since there is more to sustainability than just the ability to provide financial services, the previous years' training array was broadened by the addition of some new courses outlining overall management and asset preservation practices that can help the utility continue functioning over time. One new offering focuses on the basics of Asset Management for water and wastewater utilities. This course targets small systems without formal asset management procedures and illustrates how to set up and maintain a good program that will sustain the utility's infrastructure throughout its useful life, as well as save on operating and replacement expenses in the long run.

The second new offering is aimed at non-technical, decision-making personnel involved in small drinking water systems and provides an overview of the issues, requirements and responsibilities for those who provide community drinking water. This Small System Training unit focuses on issues like record and bookkeeping, liability and risk management, self-evaluation of capacity, the need for written procedures in certain areas, security measures and requirements, legal, financial and administrative responsibilities and the basics of a system operations and maintenance manual.

The addition of these new training programs has allowed the EFC to increase its impact throughout the region. The EFC Training and Education Manager conducted 20 training sessions throughout Region 3, reaching 200 people representing 100 organizations. Training topics included: asset management, financial management basics, and capital improvement planning. In addition, the Training Manager participated in a panel discussion sponsored by the National Association of Towns and Townships in Washington, D.C. The title of the discussion was, *"Responding to Environmental Challenges-Regulation Update, Asset Management, and Capacity Development in Smaller Communities."* The Training Manager also participated in the Annual Training Institute at NESO by presenting two training sessions and acting as a panelist/presenter in a third session. The Annual Institute is attended by trainers and assistance providers from across the country and the Maryland EFC has been one

of its co-sponsors for the past 5 years. The Training Manager also attended Rural Water conferences in Pennsylvania, Maryland and Virginia, presenting one or more training sessions at each one.

### *Utility Rate Studies*

Much of EFC's work is based on the belief that full cost pricing and sound rate setting practices are essential to sound financial management of a sustainable utility. In an effort to encourage community systems to take ownership of the rate analysis process, the EFC is shifting its focus from doing rate analyses to offering individual training on the rate analysis process itself, coupled with training and assistance to system personnel as they perform the analysis process themselves. It was felt that this method would yield more long-term enhancement to systems' capacity than actually performing this essential management function for them. Systems are also instructed in the use of the various spreadsheets that the EFC Training Manager has developed for rate analysis and are left with usable copies of these Excel documents.

## **Watershed Financing**

Local officials and community leaders often focus watershed protection efforts on one or two funding sources, such as the Environmental Protection Agency's Section 319 funds. This approach to funding is understandable given the complexity of the problems, issues, and potential solutions available. Finding public funds – usually in the form of grants – is often the easiest and least politically costly financing solution to very entrenched issues and problems. Yet there is not enough public funding or private grants to pay for the recovery of watersheds and habitat areas. The Environmental Finance Center continues to work with community leaders in creating watershed-financing plans that identify and leverage several types of sustainable funding sources, the key to successful implementation of any community effort, including watershed restoration and protection.

### *The Sustainable Financing Initiative*

In the fall of 2004, the EFC expanded its watershed financing programs with the development of the *Sustainable Financing Initiative*. The goal of this Initiative is to provide communities with the tools they need to effectively finance and implement watershed protection plans and strategies. This program is funded through a grant from the Environmental Protection Agency.



Over the next year and a half the EFC will hold four to five workshops around the region focused on helping communities overcome barriers to implementing their watershed plans. This past year the EFC, in partnership with the Maryland Department of Natural Resources (DNR), set up a steering committee comprised of representatives from a cross section of communities in Maryland who had been, or were just becoming, involved in the Watershed Restoration Action Strategy (WRAS) process through the state. The EFC convened the first meeting of the steering committee in November to discuss the issues that needed to be at the forefront of the Maryland workshop. The workshop for Maryland is currently being planned based on the issues identified by the steering committee.

### *Chesapeake Watershed Dialogues*

The National Parks Service (NPS) Rivers, Trails and Conservation Assistance (RTCA) program, in partnership with the states of Maryland, Pennsylvania and Virginia, has initiated a collaborative effort to foster local watershed management in the Chesapeake Bay basin. The first stage of this effort will consist of a series of dialogues aimed to teach local governments, organizations and other stakeholder groups about watershed planning, and how these plans need to be incorporated into local land use decisions and other conservation practices. Three to five high priority watersheds from each state will be targeted for assistance from RTCA. After the dialogue, an RTCA staff member will be assigned to assist each watershed with the completion and implementation of their watershed plan.

The EFC participated in two of these dialogues over the past year. Last January the EFC Director and Project Manager gave a general presentation on watershed financing and participated in the workshop and discussions at the Maryland dialogue. In November, the EFC again partnered with RTCA on a dialogue workshop held in the Cacapon and Lost Rivers watershed in the northeastern part of West Virginia. The West Virginia dialogue brought together state and federal agencies as well as staff from the local Congressional district to discuss how to work collaboratively on land preservation issues in this rapidly developing part of the Bay watershed.

### *Smart Growth in Maryland*

Maryland's Eastern Shore is under significant development pressure as a result of population increase. The Eastern Shore has become a popular place to live because of its proximity to major cities, water-based recreational opportunities, low cost of living and low crime rate. Small municipalities on the Eastern Shore struggle to cope with the onslaught of growth with limited, or sometimes nonexistent, staff and



financial resources and often outdated zoning ordinances. Many communities are looking for ways to turn this growth into sustainable community development.

In November 2003, the EFC's Project Manager, and a representative from the University's Cooperative Extension, attended a EPA Smart Growth training program in Washington DC. After the training the Maryland Sea Grant Extension Director received a \$5,000 grant to help implement some component of Smart Growth in Maryland. The EFC's Project Manager convened several meetings with representatives from Washington College, The University of Maryland Institute for Governmental Service (IGS), University extension representatives, The Conservation Fund and a private consultant to determine how to use the resources that this group could provide, including the EPA grant money, to do a community visioning project for the Town of Galena on Maryland's Eastern Shore. These meetings were quite successful and the group was committed and enthusiastic about the project.

The Project Manager presented the proposed project to the Galena Town Council on March 1<sup>st</sup> and asked for their input and assistance. The idea was well received by the Council and community members in the audience. Unfortunately, the Council decided that they did not want to do a visioning exercise before they rewrote their comprehensive plan. The group decided that doing a visioning exercise concurrently with a comprehensive planning was not the right approach, and decided that their resources could be better applied elsewhere.

Subsequently, IGS began working with Caroline County, Maryland to do a countywide visioning exercise. The EFC has partnered with IGS and others on this project, and is contributing to the survey phase of the project currently in development. Also, in September the Extension Coordinator called together a group of experts in this field from different departments of the University to discuss how best to coordinate and utilize the resources available to communities from the University. Everyone present agreed that coordinating the resources of this group would provide a tremendous opportunity for future projects and partnerships. The EFC will continue to work with this group on future projects.

### *Solomon's Harbor Septic Forum*

The Project Manager continued to participate on a workgroup established by Calvert County to look at innovative approaches to address the nitrogen entering Solomon's Harbor from septic systems located in nearby residential areas. The workgroup is composed of representatives from the County, technical experts and local residents. The EFC has provided advice and expertise on innovative ways to finance the

solutions that the group decided on. The group presented their recommendations to the County Commissioners, and received a generally positive response. They continue to meet periodically, and the EFC will remain engaged to assist them when needed.

## EFC COLLABORATIVE ACTIVITIES SUMMARY

### EFC NETWORK

#### *Source Water Protection Initiative*

During the past year, the Maryland EFC completed its work with the Unified Source Water Protection Project. The Project was charged with assisting communities throughout the country in their efforts to protect drinking water sources. The University of Maryland EFC is working to better incorporate such protection efforts into larger watershed protection efforts.

#### Frederick County, Maryland

During this past year the Source Water Protection Plan for Lake Linganore was completed and was presented to the County Commissioners in July. The commissioners spent a considerable amount of time questioning the Project Manager and County staff about the contents and recommendations of the report. They concluded that they would reexamine the plan in November after the County got additional input from homeowners and the agricultural community.

The revised plan was presented to the commissioners again in November and it passed 4-0, with one commissioner absent. The commissioners then directed the group to begin developing implementation strategies, and to return in several months to present their implementation plan. The process of developing an implementation strategy is being directed by the County Planning Department, but the EFC will continue to remain engaged and offer assistance in the development of this strategy.

#### Berkeley County, WV

The Berkeley County Commissioners accepted the source water protection plan and have already begun implementation of certain components. They have begun to discuss how to set up a Water Resources Advisory Committee to advise the Commissioners on water related issues. The group used a \$25,000 EPA award it received to pay for an educational program including an outreach booklet written for

the general public explaining the threats to drinking water in Berkeley County and the importance of source water protection.

*Appalachian Regional Commission (ARC) Drinking and Wastewater Infrastructure Needs Survey*

The University of Maryland EFC partnered with the EFCs at the University of North Carolina and Syracuse University on an Appalachian Region proposal that was awarded funding. This project is part of a contract with the ARC to examine water and sewer infrastructure needs and gaps in Appalachia. A graduate student was hired to help with administering the survey and developing a case study on Accident, Maryland. The project was concluded this past year with the finalization of the survey results and the completion of the case study, which will be included in the final report along with other case studies from around the region.

## **EFAB**

As a member of the EFAB Nonpoint-Source Workgroup, Dr. Jack Greer, the outgoing EFC Director, authored and submitted an article on watershed financing and the Chesapeake Bay Blue Ribbon Finance Panel for the EFAB newsletter (to be published in advance of the spring 2005 EFAB meeting). Dr. Greer also participated in regular conference calls and assisted in developing a strategy to be presented at the August 2004 meeting of EFAB in San Francisco, including a letter to the Administrator of EPA detailing important mechanisms for approaching the issue of nonpoint-source funding. In addition, Dr. Greer served as an expert witness on EFAB, and participated in the planning of a conference to be held in conjunction with the August EFAB meeting focused on the critical issue of affordability. He also helped facilitate this conference.